AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A magnetic head comprising a film comprised of diamond-like carbon (hereinafter, referred to as "diamond-like carbon film") between a substrate and an insulating layer, wherein

said film has a Vickers hardness equal to or greater than 2000 kg/mm^2; and

the diamond-like carbon film is provided directly on the substrate.

2. (canceled).

3. (original): The magnetic head according to claim 1, wherein said film has a thickness equal to or greater than 100 nm.

4. (original): The magnetic head according to claim 1, wherein said magnetic head is a magnetoresistive head.

5. (original): The magnetic head according to claim 4, wherein the diamond-like carbon film, the insulating layer, a lower shield layer, a lower gap layer, a magnetoresistive element, an upper gap layer, an upper shield layer, and a protective layer are provided in this order on one side surface of the substrate.

6. (original): The magnetic head according to claim 5, wherein said substrate is comprised of a nonmagnetic material.

7. (original): The magnetic head according to claim 6, wherein said nonmagnetic material is AlTiC ($Al_2O_3 \cdot TiC$), α -Fe_2O_3 (α -hematite), NiO-TiO_2-MgO, TiO_2-CaO, or NiO-MnO.

8. (original): The magnetic head according to claim 5, wherein said substrate is comprised of a magnetic material.

9. (original): The magnetic head according to claim 8, wherein said magnetic material is Ni-Zn ferrite or Mn-Zn ferrite.

10. (original): The magnetic head according to claim 5, wherein said magnetoresistive element is a magnetoresistive element comprising a lower layer in the form of a tantalum layer, a SAL bias layer in the form of a NiFeNb layer, an intermediate insulating layer

in the form of a tantalum layer, a magnetoresistive layer in the form of a NiFe layer, and an upper layer in the form of a tantalum layer in this order.

11. (original): The magnetic head according to claim 5, wherein said substrate has a thickness ranging from 60 to 100 μm.

12. (original): The magnetic head according to claim 5, wherein said insulating layer has a thickness ranging from 15 to 30 μm.

13. (original): The magnetic head according to claim 5, wherein said lower shield layer has a thickness ranging from 2 to 4 μm.

14. (original): The magnetic head according to claim 5, wherein said upper shield layer has a thickness ranging from 2 to 4 μm.

15. (original): The magnetic head according to claim 5, wherein said lower gap layer has a thickness ranging from 60 to 140 nm.

16. (original): The magnetic head according to claim 5, wherein said upper gap layer has a thickness ranging from 80 to 160 nm.

17. (original): The magnetic head according to claim 5, wherein said protective layer has a thickness ranging from 2 to 6 μm.

18. (original): The magnetic head according to claim 4, wherein

the substrate is comprised of a nonmagnetic material, and

the diamond-like carbon film, the insulating layer comprised of an insulating material, a lower shield layer comprised of a magnetic material, a lower gap layer comprised of a nonmagnetic material, a magnetoresistive element, an upper gap layer comprised of a nonmagnetic material, an upper shield layer comprised of a magnetic material, and a protective layer comprised of an insulating material are provided in this order on one side surface of the substrate.

19. (original): The magnetic head according to claim 18, wherein said substrate is comprised of AlTiC (Al_2O_3 · TiC), α -Fe_2O_3 (α -hematite), NiO-TiO_2-MgO, TiO_2-CaO, or NiO-MnO.

20. (original): The magnetic head according to claim 18, wherein said insulating layer is comprised of alumina (Al_2O_3), silica (SiO_2), AlN, Al-N-X (where X denotes one or more of Si, B, Cr, Ti, Ta and Nb), SiN, SiC, DLC, BN, MgO, SiAlON, AlON, Si_3Na, SiCO, SiON, or SiCON.

21. (original): The magnetic head according to claim 18, wherein said lower shield layer and said upper lower shield layer are respectively comprised of Fe-Si-Al alloy (Sendust), Ni-Fe alloy (Permalloy), or Ni-Zn alloy (hematite).

22. (original): The magnetic head according to claim 18, wherein said lower gap layer and said upper gap layer are respectively comprised of alumina (Al_2O_3) or silica (SiO_2).

23. (original): The magnetic head according to claim 18, wherein said magnetoresistive element is a magnetoresistive element comprising a lower layer in the form of a tantalum layer, a SAL bias layer in the form of a NiFeNb layer, an intermediate insulating layer in the form of a tantalum layer, a magnetoresistive layer in the form of a NiFe layer, and an upper layer in the form of a tantalum layer in this order.

24. (original): The magnetic head according to claim 18, wherein said protective layer is comprised of alumina (Al_2O_3) or silica (SiO_2).

25. (original): The magnetic head according to claim 18, wherein said substrate has a thickness ranging from 60 to 100 μ m.

26. (original): The magnetic head according to claim 18, wherein said insulating layer has a thickness ranging from 15 to 30 μ m.

27. (original): The magnetic head according to claim 18, wherein said lower shield layer has a thickness ranging from 2 to 4 μ m.

28. (original): The magnetic head according to claim 18, wherein said upper shield layer has a thickness ranging from 2 to 4 μ m.

29. (original): The magnetic head according to claim 18, wherein said lower gap layer has a thickness ranging from 60 to 140 nm.

30. (original): The magnetic head according to claim 18, wherein said upper gap layer has a thickness ranging from 80 to 160 nm.

31. (original): The magnetic head according to claim 18, wherein said protective layer has a thickness ranging from 2 to 6 μ m.